

CLAIM AMENDMENTS

1. (Currently amended) A method for performing at least one of fault diagnosis and ~~reprogramming~~ control information reprogramming in a vehicle control unit ~~in which i)~~ having messages stored in a memory area that are ~~transferred via an interface transferable~~ to a diagnostic handset that is operable within a range of 100 m around ~~the~~ a vehicle, comprising:

selecting particular messages ~~being selected~~ from a total set of said messages stored in the memory area, and ~~diagnostic information created for vehicle components based on the particular messages; ii)~~

transferring the particular messages ~~are transferred from the memory area over any of a plurality of different vehicle data buses having a plurality of different message protocols to the diagnostic handset via a wireless interface; iii)~~ a standard vehicle diagnostic interface has a data protocol converter,

~~connected to it, which converts~~ converting the particular messages from ~~a first vehicle data bus protocol~~ one of said message protocols, unknown to the diagnostic handset, into a ~~further data format, for~~ format for subsequent transfer to the diagnostic handset via ~~the~~ a wireless interface using the ~~further data format; and iv) the diagnosis is taken as a basis for transferring particular data for reprogramming the vehicle to a memory area in the vehicle control unit via the interface; wherein:~~ protocol converter,

~~the~~ outputting particular data, including any ~~transferred to the vehicle control unit include at least one~~ of software for improved vehicle component

~~operation, of individual components in the vehicle,~~ parameters for improved vehicle component operation, and a vehicle hardware description relating to ~~the hardware~~ a configuration of reconfigurable hardware; vehicle hardware, with the diagnostic handset,

obtaining the fault diagnosis from said diagnostic handset when said fault diagnosis is performed, and

~~transferred software or hardware description~~ transferring said particular data are provided directly from the diagnostic handset ~~directly~~ to the ~~vehicle~~ data protocol converter via the wireless ~~interface; and interface,~~ converting the particular messages are also converted in the data protocol converter from a first message protocol for one vehicle data bus received from the diagnostic handset into a said one of said message protocol for another protocols permitting transfer of the particular data over any of a plurality of different vehicle data bus busses, and transferring the particular data to the control unit over one of said plurality of different vehicle data buses when said control information reprogramming is performed.

2. (Currently amended) The method according to Claim 1, wherein said wireless ~~transfer of data between the control unit and the diagnostic handset interface~~ is ~~performed~~ made according to the Bluetooth standard.

3. (Currently amended) The method according to Claim 1, wherein ~~data are transferred from the control unit to the data protocol converter via a first~~ said one of said message protocols is for a J1850 data bus or CAN data bus.

4. (Currently amended) A data protocol converter for ~~a vehicle, said data protocol converter having two interfaces,~~ use in the method of claim 1, comprising:

a first ~~one of which interfaces~~ interface that is connectable to a standard vehicle diagnostic interface, and

a second ~~one of which interfaces~~ interface that is adapted to permit wireless message transfer via a diagnostic ~~handset; wherein: a data protocol translator converts messages from the standard diagnostic interface in the vehicle into messages having a wireless data format, so that the messages can be received in the diagnostic handset using the latter's wireless interface; the data protocol converter has a further interface via which it is connectable to a second standard diagnostic interface according to a different standard; and the data protocol translator converts the messages from the second standard diagnostic interface in the vehicle into messages having a wireless data format~~ handset.

5. (Currently amended) The data protocol converter according to Claim 4, wherein the wireless ~~interface converts diagnostic data into~~ message transfer is made via the Bluetooth standard, so that the diagnostic data can be displayed on a portable ~~computer programmed specifically for this purpose~~ computer.

6. (Original) The data protocol converter according to Claim 4, wherein the data protocol translator permits transfer of messages from the diagnostic handset to the vehicle.

7. (Original) The data protocol converter according to Claim 4, further comprising interfaces to a CAN data bus and to a J1850 data bus.

8. (Currently amended) The data protocol converter according to Claim 4, wherein the data protocol converter can be retrofitted ~~onto the standard diagnostic interface provided in the means of transport in the manner of~~ as an adapter, and ~~allows~~ adapter to allow data transfer from the control unit to the diagnostic handset and ~~also allows transfer of the data directly~~ from one data bus to a further data bus.